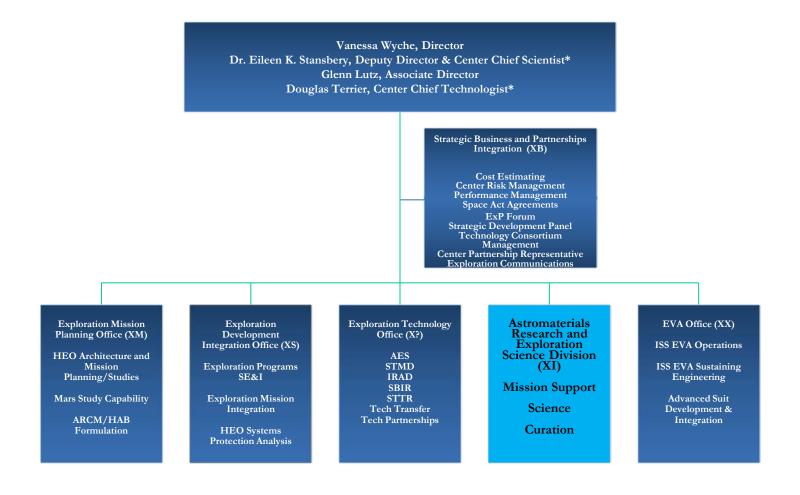


# CAPTEM November 9, 2016

# Astromaterials Acquisition and Curation Overview Francis McCubbin

# EISD Organization Alignment





#### Dr. Cindy A. Evans, Chief

Lisa F. Pace, Deputy Chief Dr. Doug W. Ming, Chief Scientist

Dr. Francis M. McCubbin, Chief Scientist for Curation; Astromaterials Curator

Dr. Paul A. Abell, Chief Scientist Small Planetary Bodies Merrell M. Skipper, Administrative Officer Beverly Haygood, Secretary (AWD)

> Dr. Everett Gibson, Emeritus Dr. Laurence Nyquist, Emeritus Dr. Carlton Allen, Emeritus





#### **Matrixed Support**

Shanda Norman, ARES Lead Budget Analyst

Daniel Zapata , ARES Budget Analyst

Astromaterials Acquisition & Curation Office (XI2)

Dr. Ryan A. Zeigler, Acting Manager

Suzanne M Summers, Secretary

Dr. Judy H Alton Dr. Marc D. Fries Dr. Mary K. Luckey Julie L. Mitchell Dr. Kevin Righter Dr. Michael E. Zolensky TBD - Geomicrobiologist Astromaterials Research Office (XI3)

Dr. David S. Draper, Manager

Dr. Lindsay D. Keller, Deputy Manager

Beverly Haygood, Secretary (AWD)

Dr. Aaron S. Burton
Dr. Mark J. Cintala
Michael Evans
Dr. John H. Jones
Dr. Sam J. Lawrence
Dr. Scott R. Messenger
Dr. David W. Mittlefehldt
Dr. Richard Morris
Dr. Keiko Messenger
Dr. Paul B. Niles
Dr. John V. Shebalin\*\*
Dr. Justin I Simon

Exploration Science Office (XI4)

Tracy A. Calhoun, Manager

Dr. Susan K. Runco, Deputy Manager

Beverly Haygood, Secretary (AWD)

Dr. Eric L.
Christiansen
Lee D. Graham
Dr. John E. Gruener
Dr. Joe A. Hamilton
Dr. Dana M. Lear
Dr. Sue M. Lederer
Dr. J.C. Liou
Dr. Mark J. Matney
Dr. Dave E. Melendrez
Dr. Randy C. Moore
Mario Runco
Eugene G. Stansbery
Dr. Will L. Stefanov

# Astromaterials Curation Office Updates



- Vanessa Wyche named head of EISD
- Cindy Evans named head of ARES
- Francis McCubbin named as Chief Scientist of Curation
- Ryan Ziegler named acting manager of Astromaterials Acquisition and Curation Office
- Interviews have started for our Astrobiologist/geomicrobiologist curator position

# Curation Infrastructure and Facilities



We have had a few problems related to water. Ryan will provide the details.

# **Curation Support to New Missions**



### OSIRIS REx & Hayabusa 2

- O-REx had a successful launch!
- 60% design review of O-Rex and Hayabusa 2 lab was successful, and 90% design review will be in December
- We will begin construction for both labs in FY 2019

#### Mars 2020

- Francis McCubbin continues as ex-officio member of the Mars 2020 Return Sample Science (RSS) Board
- Francis McCubbin is chairing the Contamination Control and Planetary Protection Working Group (CCPPWG) for Mars 2020, which was tasked by NASA HQ to determine the implications for sample science resulting from CC and PP practices and to make findings about any potential problems.
- We will be archiving witness materials and coupons in the near future.

#### **New Frontiers 2017**

• A number of sample return missions will be proposed, and curation is providing a supporting role in all proposals

# **Curation Support to New Missions**



# Asteroid Redirect Mission (ARM)

- Curation budget included in budget planning cycle (through HEOMD)
- Feeding sample return requirements forward into Orion hardware requirements
- Marc Fries is ARM Curator

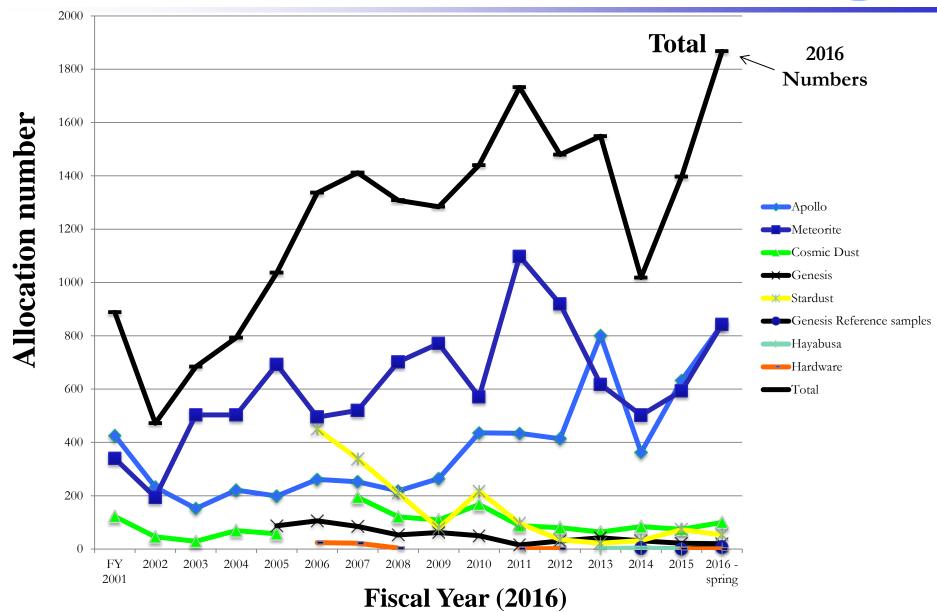
# Allocation highlights since March 15, 2016



- Allocations are up substantially compared to last few years
- 25 Stardust samples, 85 Cosmic Dust samples, and 1 Hayabusa sample allocated
- 18 Genesis flown samples and 4 non-flight reference samples were allocated
- 395 Apollo samples allocated
- 992 Apollo samples have been returned
- 400 meteorite samples allocated
- 740 meteorite samples transferred to Smithsonian
- Total of 434 new meteorites announced (215 + 219 new meteorites (2010, 2012, 2013, 2014, and 2015 seasons) published in Spring and Fall 2016 newsletters
- ~569 meteorites received from 2015 ANSMET season

### **Astromaterials Allocation Numbers**





# Status of pending approved allocations



#### **Meteorites**

1 pending request (requested by PI to delay allocation)

### Apollo

• 6 pending requests, all awaiting additional PI requirements or information

### Stardust

• 3 pending requests (pending for 2.5 months, 2 months, and 1 week, respectively), one is being processed. The other two are awaiting PI input.

### Hayabusa

• 0 pending requests

### Genesis

• 1 pending request (awaiting new loan agreement from PI)

# Cosmic Dust and Space Exposed Hardware

All allocations completed at this time

# Astromaterials Curation Office - Outreach Highlights



### Educational Disk and Outreach programs reach 1000s

- Total FY16 11 Sample Disk Cert workshops
- Total authorized trainer trainings 1 (New AMES trainer)



- Since March 15, 2016 360 disks (191 lunar/169 meteorite)
- Since March 15, 201 Thin sections: 111 thin section packages
- 670 Lunar & Mars Soil Simulant sample packs to educators, museums, students

### Displays

- Reached over 6,185 with 29 public outreach events using displays.
- •Social Media sites featuring Astromaterials
  - Blog: myares.wordpress.com, Facebook (NASA ARES), Twitter, Instagram

Follow NASA\_ARES @ any of our social media sites!

